

Richfield Dairy Environmental Impact Statement Comment Response Document

Wisconsin Department of Natural Resources

Part 1. Introduction

The Department would like to thank everyone who took the time to respond to the Draft EIS. We have considered all comments and provide the following response addressing those comments. With the submission of this letter the WEPA process is considered complete and the Final EIS is, therefore, signed.

The purpose of the EIS is to ensure that the Department and interested public have the information necessary to consider the potential impacts of the proposed project on the human environment. The purpose of the EIS is not to make regulatory decisions or to comment on other aspects of the proposed Dairy or CAFOs in general. In addition, the purpose of an EIS is not to discuss hypothetical enforcement, remedies, or rule changes, as some comments have requested. Some of the inconsistencies noted by commenters have been corrected in the Final EIS. However, the EIS attempts to summarize thousands of pages of hearing testimony and exhibits, including some differing opinions among experts and conflicting evidence. In order to complete the record in this matter, the FEIS includes all of the hearing testimony (pre-filed testimony and the hearing transcript) and the hearing exhibits, so that all information is available for the public. Supporting documents for the final EIS appear on the Department's web-site, at: <http://dnr.wi.gov/topic/agbusiness/cafo/richfelddairy.html>. In addition, there are DVDs that contain the following documents from the contested case hearing for this proposal: pre-filed testimony from all witnesses, all hearing exhibits and the hearing transcript. Accommodations can be made to view these documents by contacting Russ Anderson, Fitchburg Service Center, 3911 Fish Hatchery Road, Fitchburg, WI 53711 at 608-275-3467. Some commenters submitted additional data and information with their comments. To the extent the material submitted was not duplicative of information already in the Department's final EIS record, it has been added as appendices to the final EIS. The Department reviewed the additional information and the EIS has been updated where necessary.

It should also be noted that the DEIS was largely completed before Judge Boldt's decision was issued, so the draft document evaluated the potential environmental impacts of the high capacity wells using the pumping rate approved by DNR before Judge Boldt's decision reduced the approved amount by 27%. The final EIS was updated to evaluate potential impacts at the pumping rate approved by Judge Boldt. Ground water quality was addressed during the hearing. Concerns about what is happening in other locations of the state concerning ground water quality have limited relevance to the EIS analysis for this proposed project. DNR is in the process of determining what the AU limit will be. The new AU number will be included in the modified WPDES Permit, as ordered in Judge Boldt's decision.

Part 2. General Responses to Public Comments on the Richfield Dairy EIS

General

1. **Comment:** The DEIS ignores the wealth of data that has been collected and analyzed regarding Pleasant Lake, Chaffee Creek, and other surface water bodies in the region including evidence presented during the contested case hearing. [FOCS p. 4; PLMD p. 1-3]

Response: DNR was present at the hearing and hearing testimony and exhibits were considered in the drafting of the DEIS. The EIS was updated to include all of this information.

Specific corrections made:

- Calcareous fen drawdown discrepancies in testimony and ALJ findings [FOCS p. 7(2), 17]
- Limitations of models as presented by Kraft, Wade, Gaffield [PLMD p. 4-5] Note: Judge Boldt's decision discussed the relative merits of the groundwater models presented by Dr. Kraft and Dr. Andrews; DNR considered both models and their limitations

2. **Comment:** The information in the DEIS is largely taken from the 2011 Environmental Assessment. Where is the new information that represents what has happened in the last 3 years? [FOCS p. 4; Clarke email; Utesch email]

Response: All modeling, field studies, expert opinions, and other information was discussed in great detail at the contested case hearing. DNR was present throughout the hearing and considered information presented in the creation of the EIS. It is impossible to properly and fully summarize the information at the hearing so the pre-filed testimony, entire hearing transcript and exhibits are added as appendices to this EIS.

3. **Comment:** The EIS refers to conditions in the approval that will avoid significant adverse environmental impacts but does not identify the harm or the conditions that will be imposed to prevent the harm. The public is not given the opportunity to review or comment on the sufficiency of the conditions. [PLMD p. 5]

Response: The conditions in the approvals and permit were discussed at length in the contested case hearing. Please see comment response #2.

4. **Comment:** The DEIS is missing data and analyses regarding: [PLMD p. 7]

- Changing water chemistry – Ca++, nitrates, and phosphates
- Impacts to fisheries
- Impacts to aquatic plant communities
- Changes in the littoral zone as water is lost [see also PLMD p. 8 for specific evidence]
- Invasion of unwanted plant species – aquatic and terrestrial

Response: These impacts were discussed at length at the contested case hearing and the testimony, transcript, and exhibits have been attached to this EIS so that they are readily available to the public. Please see comment response #2.

5. Some comments, including many oral comments at the informational hearing in Adams County, expressed general thoughts in favor of or against Richfield Dairy and CAFOs in general.

Response: Thank you for the comments. The purpose of the EIS is to evaluate all of the potential environmental impacts of the proposed project, not the advantages or disadvantages of the proposed Dairy or CAFOs in general.

6. A few comments note "inconsistencies" within the DEIS document.

Response: Many of the inconsistencies have been corrected. However, the DEIS attempts to summarize thousands of pages of hearing testimony and exhibits, including some differing opinions among experts and conflicting evidence.

7. Some comments requested very specific additional information about other CAFOs. These included questions about soil qualities, cattle numbers, volumes of manure, proximity to lakes and streams, and analyses and review information. [PLMD p. 14]

Response: The EIS does not need to provide information to that degree of specificity about the CAFOs that it uses as examples. The purpose of an EIS is to provide information about environmental impacts in a way that is accessible for the public. Adding such detail would

detract from informing the public about the proposed project and would make access for the general public more difficult.

8. Many comments addressed enforcement and regulatory concerns. For example:
- Who monitors NMP compliance, nitrate load to the groundwater, the presence of *E. coli* in neighboring wells and surface water bodies? What is the mechanism, if any, to ensure compliance? What is in place for a DNR rapid response to a spill or over-application of manure? What is the historical effectiveness of these types of response? [PLMD p. 9]
 - Questions about the wisdom of designing facilities around a 25-year storm event over 24 hours [PLMD p. 12]
 - Questions about the adequacy of the regulatory standards for separation from groundwater [PLMD p. 13]
 - What are the definitions of “reasonable” and “adequate level” [PLMD p. 13] and “minimize”? [PLMD p. 16]
 - Why are CAFOs allowed to spread waste? [Lindroth comment]
 - If the Dairy is shut down due to pollution, will the downstream people be indemnified? [Lindroth comment]
 - Who will manage and enforce manure management to prevent streams, creeks, lakes, and wells from being polluted? [Seefeldt comment]
 - What remedies are available if a private well is contaminated or runs dry? [McEniry comment]
 - Will Milk Source be able to install additional high capacity wells under a different name or lease them from other facilities? [Swanson comment]

Response: The purpose of an EIS is to identify all potential environmental impacts for the proposed projects. It is not appropriate to discuss hypothetical enforcement, remedies, or rule changes in the EIS.

Cumulative Impacts

9. **Comment:** The DEIS finds no anticipated significant adverse environmental impacts at 72.5 MGY but this does not align with the ALJ’s decision that the volume must be capped at 52.5 MGY. The EIS must assess the pumping level that was actually approved by the agency. [FOCS p. 3-4; PLMD p. 5, Clarke email]

Response: The DEIS was largely completed before Judge Boldt’s decision was issued, so it evaluated the potential environmental impacts at the rate approved by DNR before Judge Boldt’s decision reduced the approved amount by 27%. Although the draft EIS may overstate the potential environmental impacts in some respects, the final EIS does provide all available information about potential impacts on the human environment. During the course of the environmental analysis process, the Department considered the potential environmental impacts based on groundwater models which predicted impacts at pumping rates of both 72.5 MGY and 52.5 MGY. The final EIS has been updated to provide additional information about potential impacts at a 52.5 MGY pumping rate. In addition, all materials associated with the contested case hearing – which includes discussion of impacts at 52.5 MGY – are attached to this EIS.

10. **Comment:** The DEIS does not adequately or accurately assess cumulative impacts to Chaffee Creek spring. According to Dr. Andrews’ model, cumulative impacts with the Richfield Dairy

wells will exceed the 20% threshold in NR 820.31(4)(d) and Wis. Stats. s. 281.34(5)(d) even before future cumulative impacts are considered. [FOCS p. 7]

Response: Evidence presented at the contested case hearing demonstrated that the Chaffee Creek spring and spring pond have already been affected by cumulative withdrawals in the area and the withdrawals from Richfield Dairy wells would add to that impact. This evidence was considered as a part of the EIS. Administrative Law Judge Boldt heard all the testimony and decided that 52.5 MGY was an acceptable pumping rate for the Richfield Dairy.

Hydrologic Cumulative Impacts

11. **Comment:** Cumulative impacts must include yet to be realized impacts from existing wells as well as future wells (currently requested and under review and reasonably foreseeable requests). [PLMD p. 6]

Response: Potential cumulative impacts from future high capacity wells were considered in the EIS Section VI.A.3, pp. 109; and in Section V.B.3 for municipal, non-community, and residential wells. It is difficult to accurately project what future impacts may be due to many unknown factors such as locations of well, rates of withdrawals, amount of irrigated land in the area, wells taken out of service, etc. The department considered future cumulative impacts to the extent possible in the EIS and will evaluate potential cumulative impacts on a case-by-case basis for future high capacity well approval applications.

Ecological Cumulative Impacts

12. **Comment:** Impacts are typically presented as drawdown percentages to water, and it is often hard to know how biological resources (for example, trout and aquatic species, wetland plants, and other resources) will be affected, what the likelihood of those impacts is, and what the loss or reduction of these resources means for the environment and users of these resources (e.g., recreational impacts). [FOCS p. 8]

Response: The EIS considers these questions in Section V.A.4.a. The department evaluated potential impacts to biological resources on a case-by-case basis. The department uses screening mechanisms, such as percentage stream depletions from a medial August flow [see, e.g., the Michigan Water Withdrawal Assessment Tool (WWAT) – which was developed to review and track impact of high capacity wells on stream in Michigan], to characterize the impacts of water withdrawals on stream resources. Using similar stream classifications in Wisconsin, this approach allows the department to predict how assemblages of fish that are typical of each stream classification would change as a result of decreased base flows. This provides information from which the department can make a determination regarding whether baseflow reductions are likely to have a significant impact on fish resources in streams.

13. **Comment:** Given admissions that “future increases in irrigation pumping and the resulting decrease in water level and groundwater inflow could result in significant changes to wetland ecology” and “using the Michigan model [all headwaters near RD] would be considered significant,” how can DNR conclude that Richfield Dairy will not contribute to significant adverse cumulative impacts? [PLMD p. 7]

Response: The EIS does not draw that conclusion. The EIS considers cumulative impacts to streams and wetlands as likely to be significant. The EIS considers whether cumulative impacts to Pleasant Lake are significant, and notes that Judge Boldt concluded that existing cumulative

impacts to streams, wetlands, including the Chaffee Creek calcareous fen wetland, and Pleasant Lake are significant.

Economic Cumulative Impacts

14. **Comment:** The DEIS needs to consider specific economic impacts to the surrounding community including impacts on tourism, property values, tax base, and the public at large. The analysis needs to be specific because economic impacts will vary greatly geographically. [Many more related sub-questions and comments, see the comment language.] [PLMD p. 8, 11, 12, 16, 17; Seefeldt comment (page 35 of compilation document)]

Response: Because regional economies are complex and interconnected, the effects of individual business changes on a region are generally difficult to detect after the fact and similarly difficult to project in advance. Doing so requires expensive data collection and modeling. A detailed analysis requires resources that are beyond the capabilities of the Department, and the results do not have a bearing on permit decisions. Also, a socioeconomic analysis is often something where the results are subjective, where something that is viewed as a negative by one person may be viewed as a positive by another. We concentrated our limited resources for what was the focus of the hearing. Furthermore, the Department provided information on a previous response to comments on a study that was done in the early 2000's in Pennsylvania describing what was discovered through that analysis. That analysis gives a descriptive write-up of what can be expected from the development of a CAFO. That information has been added to the FEIS.

15. **Comment:** The DEIS fails to assess the cumulative impacts on surface waters and groundwater of the manure spreading of Richfield Dairy in combination with manure spreading activities of other large CAFOs in the area, as well as other farms. [FOCS p.6]

Response: [An NMP for WPDES permit issuance addresses impacts on surface waters for those fields included in the permittee's plan. If a field in the permittee's plan is also used by another user (another CAFO, non-CAFO farm, industrial waste, municipal waste, septage, etc.) the permittee is responsible to account for those nutrients and waste source(s) and the impacts they would have on surface waters.

Alternatives Analysis

16. **Comment:** The alternatives analysis is inadequate because it is not a rigorous exploration and consideration of all reasonable alternatives and did not analyze the mitigation measures and conditions imposed by the ALJ in his decisions (HCW and WPDES). [FOCS p. 8]

Response: In addition to the DEIS, alternatives were discussed in the two previous EAs and at the contested case hearing.

Land Application and Water Quality

17. A number of comments were received concerning land application of manure and process wastewater and associated groundwater quality. Some of the general comments included comments about:

- Impacts to aquatic flora and fauna due to runoff and nutrient transport from land spreading [FOCS p. 5]
- Analyses to determine nitrogen uptake by crops [FOCS p. 5]

- The occurrence of groundwater pollution at other CAFOs in the Central Sands [FOCS p. 5, 6; PLMD p. 4, 5, 10]
- Water quality monitoring at the Richfield Dairy site [PLMD p. 5, 14]
- Requests for additional specific information about volumes of manures to be spread on given areas over what time periods [PLMD p. 4] and pollution levels in existing private wells [PLMD p. 12]
- Characterization of groundwater quality in the area as “fair to good” [PLMD p. 5, 10]
- Regulatory concerns about proof of adequate land base, grower agreements, and maps [PLMD p. 4, 8, 14].

Response: Most of these comments relate to issues that were discussed at length at the hearing and additional details can be found in the hearing record. Other issues raise regulatory concerns and are not appropriately addressed in the EIS. In addition, the ALJ did not require groundwater monitoring at land application fields, since he found that the NMP and use of BMPs was sufficient.

18. **Comment:** The DEIS indicates that manure application will occur in October and November but the ALJ’s decision relating to the WPDES permit found that no fall land applications are currently allowed under the NMP. If fall applications are contemplated, the DEIS should identify likely permit conditions and consider those proposed by FOCS as suggested by the ALJ. [FOCS p.6; PLMD p. 15] [specifically identified pages IV-70 and IV-75].

Response: The farm’s approved Nutrient Management Plan (NMP) is designed to address the impacts to surface water and groundwater from those fields included in the plan. All fields in the NMP are required to meet soil and phosphorus loss requirements as well as managed to account for all nutrients applied to each individual field (manure, commercial fertilizers, biosolids, industrial waste, etc.). Additionally, more restrictive practices are required when an area or field is identified as having a higher risk to groundwater or surface water pollution. See P. 54 for the start of specific information on this topic.

19. **Comment:** There is no discussion of impacts to groundwater quality, even though the DEIS acknowledges that there will be impacts based on its balancing of impacts and that DNR is requiring leak detection and monitoring to identify when these expected discharges have already caused impacts. [PLMD p. 13]

Response: These impacts were discussed at length at the contested case hearing—see hearing testimony and exhibits.

20. DNR received a number of comments about groundwater quality that discussed Kewaunee County, including:

- The groundwater pollution problems there [PLMD p. 4]
- The Kinnard Farms ALJ decision [PLMD p. 3]
- Geologic similarities [PLMD p. 5-6]
- The failure of the WPDES and NMP processes to protect groundwater quality [PLMD p. 12]

Response: Kewaunee County has different hydrogeology from the Central Sands, and has limited relevance to the EIS analysis for this proposed project. The comments also raise regulatory concerns, which are not appropriately addressed in the EIS.

21. **Comment:** The NMP has been modified since the original approval in 2011. This is not reflected in the DEIS. [FOCS p. 4]

Response: The March 2014 NMP modification is reflected in the DEIS on page IV-72.

Rare and Endangered Species

22. **Comment:** A number of endangered or threatened species can be found in Adams and Waushara counties – including the Karner Blue Butterfly, Whooping Crane, Kirtland’s warbler, and Bald Eagle – that were not sufficiently discussed in the DEIS. [PLMD p. 7, 10-11]

Response: The DEIS discussed the Kirtland’s warbler. This issue was addressed in the previous EAs as well (please refer to P. 7 of the original EA).

Animal Unit Cap

23. **Comment:** The ALJ determined that Richfield Dairy’s WPDES permit must be modified to include a cap on animal units commensurate with the 52.5 MGY pumping limit. This is not reflected in the DEIS. [FOCS p. 4]

Response: DNR is in the process of determining what the AU limit will be. The AU number will be included in a modified WPDES Permit, as ordered in Judge Boldt’s decision.

Modeling

24. **Comment:** The SSPA model was not created for Richfield Dairy and did not withstand scrutiny at the contested case hearing. Why does DNR rely on it? [PLMD p. 4]

Response: The SSPA model along with Dr. Kraft’s regional groundwater model, were discussed in great detail at the hearing. DNR considered both models, including their limitations.

Air Quality

25. **Comment:** There is no discussion correlating generic agricultural air quality impact with the Richfield Dairy. [PLMD p. 16]

Response: Air issues were addressed in the original EA.

Climate Change

26. **Comment:** DNR ignores the synergistic impacts associated with climate change and human use. [PLMD p. 17]

Response: Synergistic impacts associated with climate change and human use were outside the scope of our environmental review.

Other Comments

27. We agree with DNR’s use of modeled baseflow conditions where measured baseflow conditions are not available because it is intended to reflect an unimpacted condition. [FOCS p. 7]

28. Long Lake continues to lose water despite two years of above-average precipitation. The shared aquifer cannot sustain any factory farm or expansion thereof. [Williquette comment]

29. Pleasant Lake has gone down almost 2 feet over the summer, without the Richfield Dairy wells. There will be no Pleasant Lake if this continues. [Erickson comment]

30. A pond on our property shows lowering water levels. What would happen to it after Milk Source’s water is removed? [Pinter comment]

Response: Site-specific groundwater modeling would be needed to predict within a reasonable margin of error what would happen to the pond’s water level as a result of Milk Source’s water withdrawals.

31. Stop hi cap wells. No more studies are needed, just need to use a little common sense. Something this life changing should be up to the people that would have to live with it. [Seefeldt comment]
32. DNR must consider cumulative impacts and change course, especially for the Frozene and Bula applications in the same area. [hearing comment]
33. The EIS says there is no authority to regulate air quality. Other industries with ammonia releases have to report and this Dairy would release way more. [hearing comment]
34. Milk Source is very active in the community in a very positive way through donations to local organizations, scholarships, etc. They also invest in science to improve sustainability across the industry. [hearing comment]
35. The water use by CAFOS only represents a small percentage of the water use in the state. [hearing comment]
36. This case has taken more time than it should. This is really about people who oppose modern farms. Other wells with higher capacities in the area have not been challenged. People need to remember that this is a replacement well and that the pumping rate will actually be lowered from what it has pumped in years past. [hearing comment]
37. The modeling done by SSPA and Dr. Andrews has been shown to be accurate so far at nearby New Chester Dairy. The monitoring requirement at Richfield ensures that reliance on the model will be verifiable. [hearing comment]
38. Another high capacity well in the area will destroy us. [hearing comment]
39. This is about the impact study and the DNR did it correctly. [hearing comment]
40. We need to find a way to allow more local control. Factory farms are heavily regulated but it only works when there is enforcement. [hearing comment]
41. CAFOs create conflict and destroy the values of rural communities. This CAFO is already being approved so this [informational hearing] is a horse and pony show. [hearing comment]
42. With so many cows in a small area, truck traffic is very concentrated. There will be a manure truck every 1-1.5 miles. [hearing comment]
43. Society has forced the creation of large dairies because it is increasingly hard for small dairies to stay afloat. [hearing comment]
44. The DEIS goes into careful and quantitative detail about impacts. This has been more scrutinized than thousands of other wells and even larger ones in the Central Sands. People fight this but do not present any other alternatives. [hearing comment]

Response to all: Thank you for your comments.